WHAT IS CLAIMED IS:

1. An optical head apparatus comprising:

a head unit configured to irradiate an optical disk with a light beam for recording or reproducing data;

a holder configured to fix the head unit thereto;

a support unit configured to movably support the holder in a radial direction of the optical disk;

a support member configured to be fixed to the holder;

a rack unit configured to movably engage with the support member within a predetermined range and to have a rack along a moving direction of the holder;

a gear configured to mesh with the rack of the rack unit, so as to transmit rotating force of a drive source to the rack; and

an urging unit configured to urge the rack unit against the support member in such a manner that the rack meshes with the gear by a predetermined resilient force.

2. An optical head apparatus according to claim 1, wherein the urging unit urges the rack unit against the support member in such a manner that the rack meshes with the gear by the predetermined resilient force by allowing a boss formed at any one of the support member and the rack unit with a tapered portion formed at the other member, so as to press-fit

the boss and the tapered portion via a spring.

3. An optical head apparatus according to claim 2, wherein a plurality of engaging portions between the bosses and the tapered portions are disposed at the support member and the rack unit along the moving direction of the holder.

4. An optical head apparatus according to claim 2, wherein the spring is a coil-like tension spring hooked on the support member and the rack unit.

5. An optical head apparatus according to claim 1, wherein the support unit comprises:

a guide shaft configured to be disposed along the radial direction of the optical disk; and

a holding member fixed to the holder and configured to slidably engage with the guide shaft, and

the support member comprises containers which contain the holding members therein, to be fixed to the holder.

6. An optical head apparatus according to claim 5, wherein the plurality of holding members are arranged on the holder along the longitudinal direction of the guide shaft.

7. An optical head apparatus according to claim 1, wherein the holder is formed integrally with the support member.

8. An optical head transferring method comprising:

fixing a head unit which irradiates an optical disk with a light beam for recording or reproducing data, securing a support member to a holder movably supported in a radial direction of the optical disk, allowing a rack unit having a rack along a moving direction of the holder to movably engage with the support member within a predetermined range, and further, urging the rack unit against the support member in such a manner that the rack meshes with a gear by a predetermined resilient force; and

rotating and driving the gear, so as to apply driving force to the rack, thus moving the head unit in the radial direction of the optical disk.

9. An optical disk apparatus comprising:

a tray configured to allow an optical disk to be placed thereon;

a loading unit configured to move the tray between a first position, at which the optical disk can be loaded or unloaded, and a second position, at which the optical disk is rotated to be driven;

a head unit configured to irradiate the optical disk placed on the tray moved to the second position by the loading unit with a light beam for recording or reproducing data;

a holder configured to fix the head unit thereto;

a support unit configured to movably support the holder in a radial direction of the optical disk;

a support member configured to be fixed to the holder;

a rack unit configured to movably engage with the support member within a predetermined range and to have a rack along a moving direction of the holder;

a gear configured to mesh with the rack of the rack unit, so as to transmit rotating force of a drive source to the rack; and

an urging unit configured to urge the rack unit against the support member in such a manner that the rack meshes with the gear by a predetermined resilient force.

10. An optical disk apparatus according to claim 9, wherein the urging unit urges the rack unit against the support member in such a manner that the rack meshes with the gear by the predetermined resilient force by allowing a boss formed at any one of the support member and the rack unit with a tapered portion formed at the other member, so as to press-fit the boss and the tapered portion via a spring.

11. An optical disk apparatus according to claim 10, wherein a plurality of engaging portions between the bosses and the tapered portions are disposed at the support member and the rack unit along the moving direction of the holder.

12. An optical disk apparatus according to claim 10, wherein the spring is a coil-like tension

spring hooked on the support member and the rack unit.

13. An optical disk apparatus according to claim 9, wherein the support unit comprises:

a guide shaft configured to be disposed along the radial direction of the optical disk; and

a holding member fixed to the holder and configured to slidably engage with the guide shaft, and

the support member comprises containers which contain the holding members therein, to be fixed to the holder.

14. An optical disk apparatus according to claim 13, wherein the plurality of holding members are arranged on the holder along the longitudinal direction of the guide shaft.

15. An optical disk apparatus according to claim 9, wherein the holder is formed integrally with the support member.